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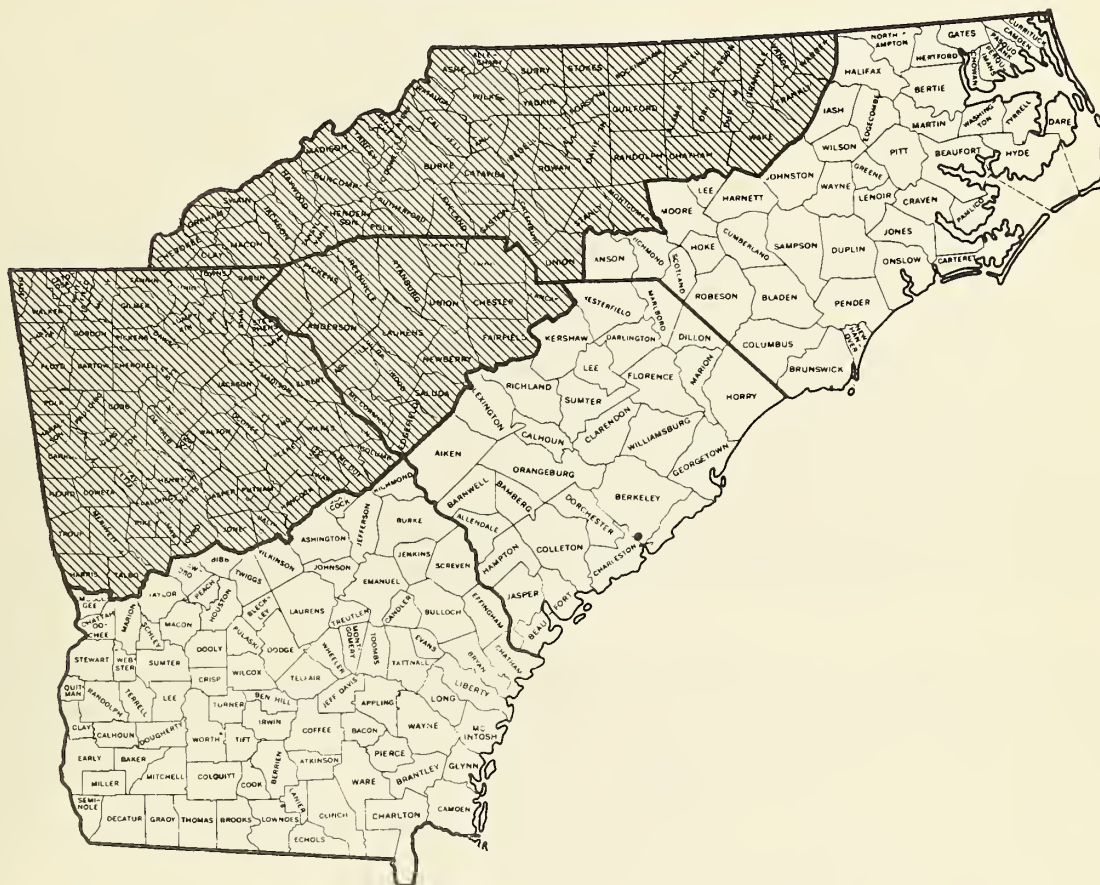
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SOIL SURVEY INTERPRETATIONS FOR WOODLANDS
 IN THE
 SOUTHERN COASTAL PLAIN AND ASSOCIATED AREAS
 OF
 GEORGIA, NORTH CAROLINA AND SOUTH CAROLINA
 With Average Rainfall of 30- to 40-Inches
 During the Frost-free Period

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PROGRESS REPORT W-16 - - January 1970

UNITED STATES DEPARTMENT OF AGRICULTURE
 Soil Conservation Service
 Fort Worth, Texas

This report contains interpretations of soil surveys for woodland use and management in the Southern Coastal Plain and associated areas of Georgia, North Carolina, and South Carolina, with mean precipitation of 30 to 40 inches during the frost-free period. The purpose is to provide currently available knowledge about soils as they relate to the establishment, growth, management, and harvesting of wood crops for the use of foresters, agricultural workers, woodland owners, and woodland managers. The information will be used by the Soil Conservation Service and cooperating agencies in the development of technical guides, soil handbooks, and published soil survey reports.

Field information was gathered by teams of foresters and soil scientists. Representatives of Federal and State agencies, the woodusing industry, and others cooperated in gathering field data. Much of the information concerning the productivity and soil suitability of southern hardwoods was compiled by Walter M. Broadfoot of the U.S. Forest Service, Southern Forest Experiment Station. The interpretations presented herein are made for use with soil surveys.

Table 2, SOIL RATINGS FOR WOODLAND USE, includes some evaluations for individual soils. The soil series listed in column one (1) are those defined according to the current soil classification system. Erosion and texture phases, within a soil series, are not shown except where differences in productivity, species suitability, or management problems exist.

Column two (2) includes a list of some of the commercially-important tree species which are adapted to the soil in column one. These are the tree species which woodland managers generally favor intermediate or improvement cuttings, after considering the form and vigor of individual trees. Priority

between species will be influenced by local marketability and the owners' objectives, as well as the quality of wood products from a given species.

Column three (3) indicates the average site index for the most important species listed in column two. The standard deviation is shown as a plus or minus figure (+) for each species where five or more plots were taken. The site index curves used for each species are shown in Table 1, GUIDE FOR WOODLAND SUITABILITY CLASSES. Site index is the average height of dominant trees at age 30 for cottonwood, age 35 for sycamore, and age 50 for all other species.

Column four (4) indicates the range of site index of the most important tree species in column two. The range of site index values is dependent on soil physical conditions, aeration, and nutrient and moisture availability during the growing season.

Column five (5) evaluates the potential erosion hazard of the soil in woodland use following cutting operations, or where the soil is exposed along roads, trails, firebreaks, or log-yarding areas. A rating of slight indicates that problems of erosion control are unimportant. A rating of moderate indicates some attention must be given to prevent unnecessary soil erosion. A rating of severe indicates that intensive treatments, or special equipment and methods of operation should be planned to minimize soil erosion. The potential erosion hazard is based on slope, soil depth and erodibility, and soil loss tolerance.

Column six (6) includes an evaluation of equipment restrictions. Ratings reflect limitations in the use of equipment for managing or harvesting the tree crop. A rating of slight indicates equipment use is seldom limited in kind or time of year. A rating of moderate indicates a need for modified equipment or seasonal restrictions due to slope, stones, obstructions, soil wetness, flooding, or overflows. A rating of severe indicates the need for specialized

equipment due to one or more of the factors listed above.

Column seven (7) indicates the degree of expected seedling mortality during the first two growing seasons after planting or seeding. Normal rainfall, adequate site preparation, good planting stock, proper planting methods, and appropriate protection and cultivation are assumed. A rating of slight indicates that unsatisfactory survival on less than 25 percent of the area is likely. A rating of moderate indicates that unsatisfactory survival is likely on 25 to 50 percent of the area planted. A rating of severe indicates that unsatisfactory survival is likely on more than 50 percent of the area.

Column eight (8) lists several suitable tree species for planting on the soil named in column one. The list may include some species which do not normally occur in native stands on the designated soil or in this physiographic area, as well as some of the important species listed in column two.

Column nine (9) shows the ordination of the soils into a woodland suitability group. A woodland suitability group is made up of kinds of soils that are capable of producing similar kinds of wood crops, that need similar management to produce these crops, and that have about the same potential productivity. The ordination system and the suitability group symbols are explained in the following paragraphs.

The first element of the group symbol indicates the woodland suitability class. It expresses site quality by an arabic numeral ranging from 1 to 5, with class 1 the highest in potential productivity, followed by class 2, 3, 4, and 5. It is based on the average site index of one or more indicator forest types or tree species, as shown in Table 1, GUIDE FOR WOODLAND SUITABILITY CLASSES. The indicator species are underscored in column two of Table 2.

The second element in the symbol indicates the suitability subclass. It expresses selected soil properties that cause moderate to severe hazards or

limitations in woodland use or management, by one of the following lower case arabic letters:

Subclass w (excessive wetness). Soils in which excessive water, either seasonally or year long, causes significant limitations for woodland use or management. These soils have restricted drainage, high water tables, or overflow hazards which adversely affect either stand development or management.

Subclass c (clayey soils). Soils having restrictions or limitations for woodland use or management due to the kind or amount of clay in the upper portion of the soil profile.

Subclass s (sandy soils). Sandy soils with little or not textural B horizons and having moderate to severe restrictions or limitations for woodland use or management. These soils impose equipment limitations, have low moisture-holding capacity, and normally are low in available plant nutrients.

Subclass o (slight or no limitations). Soils with no significant restrictions or limitations for woodland use or management.

Some kinds of soil may have more than one set of subclass characteristics.

Priority in placing each kind of soil into a subclass is in the order that the subclass characteristics are listed above.

The third element in the symbol indicates the degree of hazards or limitations and the general suitability of the soils for certain kinds of trees. The three management problems considered here are: (1) erosion hazard, (2) equipment restrictions, and (3) seedling mortality.

The numeral 1 indicates soils with no to slight management problems, and they are best suited for needleleaf trees.

The numeral 2 indicates soils with one or more moderate management problems,

and they are best suited for needleleaf trees.

The numeral 3 indicates soils with one or more severe management problems, and they are best suited for needleleaf trees.

The numeral 4 indicates soils with no to slight management problems, and they are best for broadleaf trees.

The numeral 5 indicates soils with one or more moderate management problems, and they are best suited for broadleaf trees.

The numeral 6 indicates soils with one or more severe management problems, and they are best suited for broadleaf trees.

The numeral 7 indicates soils with no to slight management problems, and they are suitable for either needleleaf or broadleaf trees.

The numeral 8 indicates soils with one or more moderate management problems, and they are suitable for either needleleaf or broadleaf trees.

The numeral 9 indicates soils with one or more severe management problems, and they are suitable for either needleleaf or broadleaf trees.

TABLE 1 - GUIDE FOR WOODLAND SUITABILITY CLASSES
SOUTHERN COASTAL PLAIN

		1	2	3	4	5
Indicator Forest		Very	High	Moderately	Moderate	Low
Type or Species		High		High		
		Site Index				
Cottonwood	(1)	106+	96-105	86-95	76-85	75-
Yellow-poplar	(2)	106+	96-105	86-95	76-85	75-
Sweetgum	(3)	96+	86-95	76-85	66-75	65-
Water oak	(4)	96+	86-95	76-85	66-75	65-
Loblolly pine	(5)	96+	86-95	76-85	66-75	65-
Slash pine	(6)	96+	86-95	76-85	66-75	65-
Longleaf pine	(6)	86+	76-85	66-75	56-65	55-
Sou.-red oak	(7)	86+	76-85	66-75	56-65	55-
Water tupelo	(8)	86+	76-85	66-75	56-65	55-
Redcedar	(9)	66+	56-65	46-55	35-45	35-

- (1) Broadfoot, W. M., 1960, Field Guide for Evaluating Cottonwood Sites, USFS Occ., Paper 178 (Fig. 4).
- (2) Doolittle, W. T., 1957, Site Index Curves for Yellow-poplar So. Appalachians.
- (3) Broadfoot, W. M., 1959, Guide for Evaluating Sweetgum Sites, USFS Occ., Paper 176 (Fig. 4).
- (4) Broadfoot, W. M., 1963, Guide for Evaluating Water Oak Sites in the Mid-south, USFS Res. Paper SO-1 (Fig. 4).
- (5) Coile, T. S. and F. X. Schumacher, Jour. For. 53: 432-453 (Fig. 4).
- (6) U. S. Forest Service, 1929 Volume, Yield, and Stand Tables for Second Growth Southern Pines, USDA Misc. Publ. 50 (Fig. 2, 3, 4).
- (7) Olson, D. G., 1959, Site Curves for Upland Oaks in the Southern Appalachians, S. E. Forest Experiment Station Research Note 125.
- (8) Applequist, M. D., 1959, Soil-Site Studies, Sou. Hardwoods (Fig. 7).
- (9) TVA 1943, Site Curves, E. Redcedar, Tennessee Valley.

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Associated Areas of Georgia, North Carolina and South Carolina

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Alaga</u> 1-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	81+6 80 65+5	72-88 73-87 60-71	Slight	Slight to Moderate	Moderate	Slash pine Longleaf pine	3s2
<u>Alapaha</u> 0-5% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine	87 87 70	78-93 78-93 60-75	Slight	Moderate	Slight to Moderate	Slash pine Loblolly pine	2w2
<u>Albany</u> 0-5% slopes	Slash pine Loblolly pine Longleaf pine	80 80 67	72-88 72-88 60-75	Slight	Moderate	Moderate	Slash pine Loblolly pine	3w2
<u>Americus</u> 1-25% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine	84 84 70	78-89 78-89 66-75	Slight	Moderate	Moderate	Slash pine Longleaf pine	3s2
<u>Amite</u> 0-5% slopes	<u>Loblolly pine</u> <u>Sweetgum</u> Slash pine Red oaks White oaks	94 93 94 - -	90-100 85-100 90-100 - -	Slight	Slight	Slight	Slash pine Yellow-poplar Loblolly pine	2o7
<u>Amy</u> 0-2% slopes	<u>Sweetgum</u> 1/ Loblolly pine 1/ Water oaks Green ash Red oaks Tupelos	90 90 90 - - -	84-96 84-96 - - - -	Slight	Severe 2	Severe 2	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/ Sycamore 3/ Water tupelo	2w9
<u>Angie</u> 0-5% slopes	<u>Loblolly pine</u> <u>Sweetgum</u> Blackgum Water oaks Red oaks	90 90 - 90 -	85-96 83-96 - - -	Slight	Moderate	Moderate	Loblolly pine Slash pine Sycamore Yellow-poplar Sweetgum	2w8
<u>Ardilla</u> 0-5% slopes	<u>Slash pine</u> Sweetgum Blackgum Water oaks Longleaf pine	89+4 90 - 90 78	83-93 - - - 73-84	Slight	Moderate	Slight	Loblolly pine Slash pine Sycamore Sweetgum	2w8
<u>Atmore</u> 0-2% slopes	<u>Slash pine</u> 1/ Loblolly pine 1/ Longleaf pine 1/ Sweetgum 1/ Water oak Green ash	85 85 73+4 85 85 -	75-90 77-92 67-78 80-90 80-90 -	Slight	Severe 2	Severe 2	Loblolly pine Slash pine Sweetgum Sycamore Nuttall oak	3w9
<u>Augusta</u> 0-5% slopes	<u>Loblolly pine</u> Sweetgum Sycamore White oaks Red oaks	92 90 90 - -	- - - - -	Slight	Moderate	Slight	Loblolly pine Slash pine Sycamore Yellow-poplar Cherrybark oak	2w8

1/ Potential productivity attainable only on areas with adequate surface drainage.

2/ Equipment restrictions and seedling mortality are moderate on areas with adequate surface drainage.

3/ Tree plantings is feasible only on areas with adequate surface drainage.

TABLE 2. SOIL RATINGS FOR WOODLAND USE
Southern Coastal Plain and Associated Areas of Georgia, North Carolina and South CarolinaPage 2 of 15

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Aycock</u> 0-10% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u> <u>Southern red oak</u>	89 89 75 80	84-94 85-94 70-80 -	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Barclay</u> 0-2% slopes	<u>Loblolly pine</u> <u>Sweetgum</u> <u>Slash pine</u> <u>Yellow-poplar</u> <u>Red oaks</u> <u>White oaks</u>	86+5 90 85 90 - -	78-94 86-95 - - - -	Slight	Moderate	Moderate	Loblolly pine Sycamore Yellow-poplar Slash pine Cherrybark oak	2w8
<u>Barth</u> 0-5% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u>	83 83 75	75-90 75-90 70-80	Slight	Moderate	Moderate	Slash pine Loblolly pine	3w2
<u>Bayboro</u> 0-2% slopes	<u>Loblolly pine</u> <u>1/</u> <u>Sweetgum</u> <u>1/</u> <u>Slash pine</u> <u>1/</u> <u>Tupelos</u> <u>Red oaks</u> <u>White oaks</u>	95+5 94+3 95 - - -	87-103 80-100 87-103 - - -	Slight	Severe <u>2/</u>	Severe <u>2/</u>	Slash pine <u>3/</u> Loblolly pine <u>3/</u> Sweetgum <u>3/</u> Sycamore <u>3/</u> Water tupelo	2w9
<u>Bibb</u> 0-2% slopes	<u>Sweetgum</u> <u>1/</u> <u>Loblolly pine</u> <u>1/</u> <u>Slash pine</u> <u>1/</u> <u>Water oak</u> <u>1/</u> <u>Green ash</u> <u>1/</u> <u>Cottonwood</u> <u>1/</u> <u>Sycamore</u> <u>Tupelos</u> <u>Red oaks</u> <u>White oaks</u>	90+9 92+6 90 90+10 86+2 100 - - - -	78-97 84-100 82-98 78-100 64-98 80-110 - - - -	Slight	Severe <u>2/</u>	Severe <u>2/</u>	Loblolly pine <u>3/</u> Sycamore <u>3/</u> Cottonwood <u>3/</u> Nuttall oak	2w9
<u>Bladen</u> 0-2% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Sweetgum</u> <u>Tupelos</u> <u>Red oaks</u> <u>White oaks</u>	94+3 91 90 - - -	86-102 85-100 80-100 - - -	Slight	Severe <u>2/</u>	Severe <u>2/</u>	Loblolly pine <u>3/</u> Slash pine <u>3/</u> Sycamore <u>3/</u> Water oak Nuttall oak	2w9
<u>Blaney</u> 1-15% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	73+5 75 61+6	67-79 66-75 56-68	Slight	Moderate	Moderate	Slash pine Longleaf pine	4s2
<u>Blanton</u> 1-10% slopes	<u>Slash pine</u> <u>Longleaf pine</u> <u>Loblolly pine</u>	80 70+4 80	76-85 66-75 76-85	Slight	Moderate	Moderate	Slash pine Longleaf pine	3s2
<u>Boswell</u> 1-15% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	85+4 84 65+3	76-90 80-90 60-70	Slight	Moderate	Moderate	Loblolly pine	3c2
<u>Bowie</u> 0-10% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	86 85 72+5	80-92 80-92 63-76	Slight	Slight	Slight	Loblolly pine Slash pine	2o1

TABLE 2. SOIL RATINGS FOR WOODLAND USE
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Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Brogdon</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Red oaks	86 85 -	80-92 80-92 -	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Buncombe</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Water oak Sweetgum Cottonwood Sycamore Red oaks White oaks	95 95 105 113 - - - -	90-100 90-100 95-110 105-115 - - - -	Slight	Moderate	Moderate	Sycamore Slash pine Cottonwood	2s8
<u>Byars</u> 0-2% slopes	<u>Sweetgum</u> 1/ <u>Loblolly pine</u> 1/ Slash pine 1/ Tupelos Cypress Water oaks White oaks	90 95 92 - - 90 -	86-100 87-103 85-100 - - - -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sycamore 3/ Water tupelo	2w9
<u>Cahaba</u> (lower slopes and terraces) 0-10% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Yellow-poplar Red oaks White oaks	91+4 90 90 - - -	85-96 85-95 80-100 - - -	Slight	Slight	Slight	Slash pine Loblolly pine Yellow-poplar Sycamore Cherrybark oak	2o7
upper slopes, 5-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	86 86 72+5	80-90 80-90 67-78	Slight	Slight	Slight	Slash pine Loblolly pine Longleaf pine	2o1
<u>Cape Fear</u> 0-2% slopes	<u>Sweetgum</u> 1/ <u>Loblolly pine</u> 1/ Tupelos Cypress Water oak 1/	90 90 - - 90	85-96 85-96 - - 85-95	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/ Sycamore 3/ Water tupelo	2w9
<u>Carnegie</u> 0-10% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	86 86 70	80-92 80-92 64-75	Slight	Slight	Slight	Loblolly pine Slash pine	2o1
<u>Charleston</u> 0-5% slopes	<u>Loblolly pine</u>	76	70-82	Slight	Slight	Slight	Slash pine Loblolly pine	3o1
<u>Chastain</u> 0-2% slopes	<u>Sweetgum</u> <u>Water oak</u> Cottonwood Green ash <u>Loblolly pine</u> Tupelos Red oaks White oaks	94+11 89+13 90 88+10 90+3 - - -	82-101 77-96 70-100 66-93 82-98 - - -	Slight	Severe 2/	Severe 2/	Sycamore 3/ Sweetgum 3/ Loblolly pine 3/ Cherrybark oak	2w9
<u>Chipley</u> 0-5% slopes	<u>Slash pine</u> <u>Loblolly pine</u> Longleaf pine	88+6 89+8 74+4	80-94 80-96 69-79	Slight	Moderate	Moderate	Slash pine Loblolly pine	2w2

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Associated Areas of Georgia, North Carolina and South Carolina

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Cowarts</u> 2-10% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine	86 86 67	80-92 80-92 62-73	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Coxville</u> 0-2% slopes	<u>Loblolly pine</u> 1/ <u>Slash pine</u> 1/ Longleaf pine 1/ <u>Sweetgum</u> 1/ Water oaks Tupelos	90+4 90 71+6 90 90 -	82-98 80-95 64-77 84-98 - -	Slight	Severe 2/	Severe 2/	Sycamore 3/ Slash pine 3/ Loblolly pine 3/ Sweetgum	2w9
<u>Craven</u> 0-15% slopes	<u>Loblolly pine</u> Longleaf pine Water oak	81+4 67+2 80	76-86 62-73 -	Slight	Moderate	Slight	Loblolly pine Slash pine	3w2
<u>Cuthbert</u> 2-15% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	80 80 66	73-85 75-85 60-72	Slight to Moderate	Slight to Moderate	Slight to Moderate	Loblolly pine	3c2
<u>Dawhoo</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Sweetgum 1/ Water oak Tupelos Cypress Slash pine 1/	86 90 90 - - 86	78-93 - - - - 78-93	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/ Water tupelo	2w9
<u>Darovan</u> 0-2% slopes	<u>Slash pine</u> 1/ Loblolly pine 1/ Magnolias Tupelos	70 70 - -	- - - -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/	4w3
<u>Dothan</u> 2-10% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine	89+5 88+5 67	86-97 85-94 63-73	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Dragston</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine Sweetgum Yellow-poplar	90 90 75 90 100	85-96 85-97 70-80 85-97 93-105	Slight	Moderate	Slight	Loblolly pine Slash pine Sweetgum	2w8
<u>Dunbar</u> 0-5% slopes	Loblolly pine <u>Slash pine</u> Longleaf pine Water oaks Red oaks Blackgum Yellow-poplar Sweetgum	90 88+5 70 - - - - 90	80-96 80-96 63-73 - - - - -	Slight	Moderate	Moderate	Slash pine Loblolly pine Sweetgum Yellow-poplar	2w8
<u>Duplin</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Blackgum Red oaks Yellow-poplar	90 90 90 - - 100	82-96 83-96 85-100 - - -	Slight	Moderate	Moderate	Slash pine Loblolly pine Sycamore Sweetgum Yellow-poplar	2w8

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Associated Areas of Georgia, North Carolina and South Carolina

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Edisto</u> 0-2% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Green ash Red oaks White oaks Yellow-poplar	98+6 96 100 - - - 110	89-105 85-101 92-105 - - - 100-118	Slight	Moderate	Moderate	Slash pine Loblolly pine Sycamore Yellow-poplar	1w8
<u>Esto</u> 2-15% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	82+6 80 66	76-88 75-86 61-74	Slight	Slight	Slight	Slash pine Loblolly pine	3o1
<u>Eustis</u> 2-25% slopes	Slash pine <u>Loblolly pine</u> Longleaf pine	82 84+4 65	78-88 78-89 60-70	Slight	Moderate	Moderate	Slash pine Longleaf pine	3s2
<u>Exum</u> 0-5% slopes	<u>Loblolly pine</u> Longleaf pine Sweetgum Yellow-poplar Red oaks White oaks	90 77 90 100 - -	86-95 70-84 85-95 95-106 - -	Slight	Moderate	Slight	Slash pine Loblolly pine Sycamore Yellow-poplar Sweetgum	2w8
<u>Faceville</u> (loamy sand to sand) 2-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	82 80 65	76-87 76-85 60-70	Slight	Slight	Slight	Slash pine Loblolly pine	3o1
sandy clay to clay, 5-25% slopes, eroded	<u>Loblolly pine</u> Longleaf pine	76 58	71-82 54-64	Moderate	Moderate	Moderate	Loblolly pine	3c2
<u>Fairhope</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Red oaks White oaks	87+3 89 90 - -	80-96 80-96 82-100 - -	Slight	Moderate	Moderate	Loblolly pine Slash pine Sycamore Yellow-poplar	2w8
<u>Fuquay</u> 2-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	83+5 83 67+4	76-89 76-89 62-72	Slight	Moderate	Moderate	Slash pine Longleaf pine	3s2
<u>Gilead</u> 2-15% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	82+5 80 66+5	76-90 76-90 60-72	Slight	Slight	Slight	Slash pine Loblolly pine	3o1
<u>Goldsboro</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine Sweetgum Red oaks White oaks	90+7 93+5 77+6 90 - -	76-90 76-90 70-84 85-96 - -	Slight	Moderate	Slight	Loblolly pine Slash pine Sycamore Yellow-poplar Sweetgum	2w8

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Associated Areas of Georgia, North Carolina and South Carolina

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Grady</u> 0-2% slopes	<u>Loblolly pine 1/</u> <u>Slash pine 1/</u> <u>Sweetgum 1/</u> <u>Tupelos</u>	90+6 88 90 -	82-98 80-95 - -	Slight	Severe 2/	Severe 2/	<u>Loblolly pine 3/</u> <u>Slash pine 3/</u> Sycamore Water tupelo	2w9
<u>Grangeburg</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Sweetgum</u> <u>Red oaks</u> <u>White oaks</u>	90 90 90 - -	86-95 85-95 85-96 - -	Slight	Moderate	Moderate	<u>Slash pine</u> <u>Loblolly pine</u> <u>Sycamore</u> <u>Yellow-poplar</u> <u>Sweetgum</u>	2w8
<u>Greenville</u> (sandy loam to fine sandy loam) 1-15% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	83+5 82 70	77-90 76-90 65-75	Slight	Slight	Slight	<u>Loblolly pine</u> <u>Slash pine</u>	3o1
sandy clay to clay, 5-15% slopes, eroded	<u>Loblolly pine</u> <u>Longleaf pine</u>	76 66	72-82 60-70	Moderate	Moderate	Moderate	<u>Loblolly pine</u>	3c2
<u>Henderson</u> 1-15% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	80 80 68	76-85 76-85 65-75	Slight	Slight	Slight	<u>Loblolly pine</u> <u>Slash pine</u>	3o1
<u>Hockley</u> 0-5% slopes	<u>Loblolly pine</u> <u>Longleaf pine</u> <u>Sweetgum</u> <u>Red oaks</u> <u>White oaks</u>	89 70 90 - -	86-95 66-75 85-95 - -	Slight	Slight	Slight	<u>Loblolly pine</u> <u>Slash pine</u> <u>Yellow-poplar</u>	2o7
<u>Hoffman</u> 1-15% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	70 70 57+3	65-75 65-75 53-62	Slight	Slight	Slight	<u>Slash pine</u> <u>Longleaf pine</u>	4o1
<u>Hyde</u> 0-2% slopes	<u>Loblolly pine 1/</u> <u>Slash pine 1/</u> <u>Tupelos</u> <u>Sweetgum 1/</u> <u>Water oaks</u> <u>Cypress</u> <u>Pond pine</u>	96 96 - 97 95 - 80	87-103 87-102 - 89-105 90-100 - 76-85	Slight	Severe 2/	Severe 2/	<u>Slash pine 3/</u> <u>Loblolly pine 3/</u> <u>Water tupelo</u> <u>Sweetgum 3/</u>	1w9
<u>Irvington</u> 0-10% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u> <u>Yellow-poplar</u> <u>Red oaks</u>	86 86 68 90 -	80-92 80-92 64-72 86-98 -	Slight	Slight	Slight	<u>Loblolly pine</u> <u>Slash pine</u> <u>Yellow-poplar</u>	2o7

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Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Iuka</u> 0-2% slopes	<u>Loblolly pine</u>	97+7	90-105	Slight	Moderate	Moderate	Loblolly pine Slash pine Sycamore Yellow-poplar Sweetgum Cherrybark oak	1w8
	<u>Sweetgum</u>	102+6	90-109					
	Water oak	100+9	88-107					
	Yellow-poplar	-	-					
	Sycamore	-	-					
	Red oaks	-	-					
	White oaks	-	-					
<u>Izagora</u> 0-5% slopes	<u>Loblolly pine</u>	90	86-95	Slight	Moderate	Moderate	Loblolly pine Yellow-poplar Sweetgum Slash pine Cherrybark oak	2w8
	<u>Sweetgum</u>	90	80-100					
	Yellow-poplar	-	-					
	Red oaks	-	-					
	White oaks	-	-					
<u>Johns</u> 0-2% slopes	<u>Loblolly pine</u>	86	81-92	Slight	Moderate	Moderate	Loblolly pine Slash pine	2w2
	Sweetgum	90	80-100					
	Slash pine	86	80-92					
<u>Johnston</u> 0-2% slopes	<u>Loblolly pine</u> 1/	97	87-103	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/ Water tupelo	1w9
	<u>Sweetgum</u> 1/	111	99-113					
	<u>Water oak</u>	103	90-110					
	Tupelos	-	-					
	Cypress	-	-					
	Red oaks	-	-					
	White oaks	-	-					
	Green ash	-	-					
<u>Kalmia</u> (lower slopes and terraces) 0-10% slopes	<u>Loblolly pine</u>	88+5	84-93	Slight	Slight	Slight	Loblolly pine Slash pine Yellow-poplar Cherrybark oak	2o7
	Slash pine	88	81-93					
	Sweetgum	85	80-90					
	Yellow-poplar	96	90-105					
	Red oaks	-	-					
	White oaks	-	-					
upper slopes 2-25% slopes	<u>Loblolly pine</u>	86	81-91	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
	Slash pine	86	80-90					
<u>Kenansville</u> 0-5% slopes	<u>Loblolly pine</u>	80	76-85	Slight	Moderate	Moderate	Slash pine Loblolly pine	3s2
	Longleaf pine	65	60-70					
<u>Kershaw</u> 2-25% slopes	Slash pine	65	55-70	Slight	Moderate	Severe	Sand pine Longleaf pine Slash pine	5s3
	Longleaf pine	55	50-60					
<u>Kiawah</u> 0-5% slopes	<u>Loblolly pine</u>	83+6	76-91	Slight	Moderate	Moderate	Slash pine Loblolly pine	3w2
	Longleaf pine	66+4	60-71					
	Slash pine	80	70-85					
	Sweetgum	80	76-85					
	Water oak	80	76-85					
<u>Kinston</u> 0-2% slopes	<u>Loblolly pine</u> 1/	100+9	90-110	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/	1w9
	<u>Sweetgum</u> 1/	95	85-100					
	Water oaks	90	80-95					
	Tupelos	-	-					
	Cottonwood 1/	100	90-110					

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Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Lakeland</u> 1-25% slopes	Loblolly pine Slash pine <u>Longleaf pine</u>	75+5 75 61+4	64-81 65-80 56-66	Slight	Moderate	Moderate	Slash pine Longleaf pine	4s2
<u>Leaf</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Slash pine 1/ Sweetgum 1/ Water oaks Red oaks White oaks	91+5 90 85 - - -	84-100 84-100 75-90 - - -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/	2w9
<u>Leefield</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	84 84 70	74-90 75-90 65-75	Slight	Moderate	Moderate	Slash pine Loblolly pine	3w2
<u>Lenoir</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Red oaks White oaks Longleaf pine	86+5 85 88 - - 67	75-92 78-92 84-95 - - 60-73	Slight	Moderate	Moderate	Loblolly pine Slash pine Sycamore Sweetgum	2w8
<u>Leon</u> 0-5% slopes	Loblolly pine Slash pine <u>Longleaf pine</u>	74 74 65+6	67-83 67-83 58-71	Slight	Moderate	Moderate	Slash pine Loblolly pine	4w2
<u>Lucy</u> 1-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	84+4 84 71+5	79-90 79-90 63-76	Slight	Moderate	Moderate	Slash pine Loblolly pine	3s2
<u>Lumbec</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Slash pine 1/ Pond pine Water tupelo Sweetgum White oak	94+5 91+5 75 70 90 -	86-102 83-99 70-81 - - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Water tupelo Sweetgum	2w9
<u>Lynchburg</u> 0-5% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine Yellow-poplar Sweetgum Red oaks White oaks Blackgum	91+4 86+4 74+5 92 90 - - -	79-94 79-94 68-79 85-100 - - - -	Slight	Moderate	Slight	Slash pine Loblolly pine Yellow-poplar Sycamore Sweetgum	2w8
<u>Lynn Haven</u> 0-2% slopes	<u>Slash pine</u> 1/ Loblolly pine 1/ Longleaf pine 1/	70 70 60	62-78 62-78 54-66	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/	4w3
<u>Magnolia</u> (loamy sand to sandy loam) 0-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	82+6 80 61	76-88 76-86 56-66	Slight	Slight	Slight	Loblolly pine Slash pine	3o1

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Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Magnolia - Cont'								
clay to sandy clay, eroded, 5-25% slopes	Loblolly pine	76	70-82	Moderate	Moderate	Moderate	Loblolly pine	3c2
Mantachie 0-2% slopes	Loblolly pine Slash pine Sweetgum Water oak Cottonwood Green ash Sycamore Tupelos Red oaks White oaks	98+7 96 100+6 94+5 92 88+10 - - - -	90-106 87-103 88-107 82-101 72-103 66-93 - - - -	Slight	Moderate	Moderate	Loblolly pine Slash pine Sweetgum Cottonwood Sycamore Yellow-poplar Cherrybark oak	1w8
Marlboro (loamy sand to fine sandy loam) 0-15% slopes	Loblolly pine Slash pine Longleaf pine	82+6 80 62	76-89 76-86 57-66	Slight	Slight	Slight	Slash pine Loblolly pine	3o1
clay loam to sandy clay, eroded, 2-15% slopes	Loblolly pine	77	71-82	Moderate	Moderate	Moderate	Loblolly pine	3c2
Mascotte 0-2% slopes	Slash pine Loblolly pine Longleaf pine	77 77 65+5	72-88 72-88 60-70	Slight	Moderate	Moderate	Slash pine Loblolly pine	3w2
Maxton 0-10% slopes	Loblolly pine Sweetgum Yellow-poplar Red oaks White oaks	90 90 100 - -	86-95 85-95 90-110 - -	Slight	Slight	Slight	Loblolly pine Slash pine Yellow-poplar Cherrybark oak	2o7
McColl 0-2% slopes	Loblolly pine 1/ Slash pine 1/ Pond pine Cypress Tupelos	87+6 86 70 - -	81-93 81-93 64-76 - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Sweetgum 3/ Sycamore 3/ Shumard oak 3/ Water tupelo	2w9
Meggett 0-2% slopes	Slash pine 1/ Loblolly pine 1/ Sweetgum 1/ Water oak Green ash	101+6 100 100 100 -	92-108 92-108 90-110 90-110 -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Sweetgum 3/ Sycamore 3/	1w9
Mvatt 0-2% slopes	Loblolly pine 1/ Slash pine 1/ Sweetgum 1/ Water oak Red oaks Sycamore White oaks	95+6 92 92 86 - - -	87-103 85-100 77-99 71-93 - - -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/ Sycamore 3/ Shumard oak	2w9

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Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Nahunta</u> 0-2% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Yellow-poplar Red oaks White oaks	87+4 86 90 100 - -	79-95 79-93 85-96 90-110 - -	Slight	Moderate	Moderate	Loblolly pine Slash pine Yellow-poplar Sycamore Cherrybark oak	2w8
<u>Nixonton</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Yellow-poplar Sweetgum Red oaks White oaks White ash	90 90 100 90 - - -	86-95 85-95 90-110 80-100 - - -	Slight	Slight	Slight	Loblolly pine Slash pine Yellow-poplar	2o7
<u>Norfolk</u> 0-15% slopes	<u>Loblolly pine</u> Longleaf pine Slash pine	86+5 68+4 86	78-92 63-73 78-92	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Ochlockonee</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Water oak Yellow-poplar Red oaks White oaks	98+5 98 90+5 82 - - -	95-105 94-105 78-100 70-89 - - -	Slight	Slight	Slight	Slash pine Loblolly pine Yellow-poplar Cottonwood Sycamore Cherrybark oak	1o7
<u>Ocilla</u> 0-5% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine	80+5 79+6 68+6	72-88 72-88 60-75	Slight	Moderate	Moderate	Slash pine Loblolly pine	3w2
<u>Oktibbeha</u> 2-10% slopes	<u>Loblolly pine</u> Redcedar Southern red oak	76+5 45 70	69-82 40-50 66-75	Slight to Moderate	Moderate	Moderate	Loblolly pine Redcedar	3c8
<u>Olustee</u> 0-2% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	78 76 68	69-82 69-83 63-72	Slight	Moderate	Moderate	Slash pine Loblolly pine	3w2
<u>Onslow</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	76 80 67	70-82 80-95 62-73	Slight	Slight	Slight	Slash pine Loblolly pine	3o1
<u>Orangeburg</u> 1-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	86+5 86 70	80-92 80-92 65-75	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Osier</u> 0-5% slopes	<u>Slash pine</u> 1/ Loblolly pine 1/ Longleaf pine 1/	80 80 68	72-88 72-88 62-73	Slight	Severe 2/	Severe 2/	Slash pine 3/	3w3
<u>Pactolus</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	84 83 70	76-91 76-91 64-78	Slight	Moderate	Moderate	Slash pine Loblolly pine	3w2

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Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Pamlico</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Pond pine Water tupelo Baldcypress	75 55 60 -	68-80 - - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/	4w3
<u>Pansey</u> 0-2% slopes	<u>Loblolly pine</u> 1/ <u>Sweetgum</u> 1/ Slash pine 1/ Water oak Red oaks White oaks	82+6 80 80 80 - -	77-92 75-85 72-88 75-86 - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Sweetgum 3/ Shumard oak 3/	3w9
<u>Pantego</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Slash pine Pond pine Cypress Tupelos Water oaks	98+5 95 73+5 - - -	88-104 82-98 67-79 - - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Sycamore 3/ Sweetgum 3/ Water tupelo	1w9
<u>Pasquotank</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Green ash Sweetgum 1/ Water oaks	94 80 90 90	86-100 76-85 86-95 86-95	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/ Sycamore 3/	2w9
<u>Pelham</u> 0-2% slopes	<u>Slash pine</u> 1/ Loblolly pine 1/ Longleaf pine 1/ Tupelos	90+2 90 74 -	82-98 82-98 66-80 -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/	2w3
<u>Poarch</u> 0-5% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine	90 90 73	85-95 85-95 66-78	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Pocalla</u> 0-15% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	80 83 65	76-85 76-87 60-70	Slight	Moderate	Moderate	Slash pine Loblolly pine	3s2
<u>Ponzer</u> 0-2% slopes	<u>Slash pine</u> 1/ Pond pine Tupelos Cypress	70 60 - -	65-80 55-66 - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/	4w3
<u>Pooler</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Slash pine 1/ Sweetgum 1/ Red oaks Tupelos	95 95 90 - -	86-101 86-101 85-95 - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Sweetgum 3/ Nuttall oak 3/ Sycamore 3/	2w9
<u>Portsmouth</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Slash pine 1/ Pond pine Water oaks 1/ Tupelos Cypress	96 90 80 90 - -	85-101 82-98 74-85 84-97 - -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sycamore 3/ Water tupelo	1w9

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Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Plummer</u> 0-2% slopes	<u>Slash pine 1/</u> <u>Loblolly pine 1/</u> <u>Longleaf pine 1/</u> Tupelos	88+5 91 70 -	77-93 80-95 64-75 -	Slight	Severe 2/	Severe 2/	<u>Slash pine 3/</u> <u>Loblolly pine 3/</u>	2w3
<u>Rains</u> 0-2% slopes	<u>Slash pine 1/</u> <u>Loblolly pine 1/</u> <u>Sweetgum 1/</u> Tupelos	91+5 94+5 90 -	81-97 84-100 80-95 -	Slight	Severe 2/	Severe 2/	<u>Slash pine 3/</u> <u>Loblolly pine 3/</u>	2w3
<u>Red Bay</u> 1-15% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	89 87 70	85-95 85-95 65-75	Slight	Slight	Slight	<u>Slash pine</u> <u>Loblolly pine</u>	2o1
<u>Rimini</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	65 65 55	56-70 55-70 50-60	Slight	Moderate	Severe	<u>Slash pine</u> <u>Longleaf pine</u> <u>Sand pine</u>	5s3
<u>Riverview</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Yellow-poplar</u> <u>Sweetgum</u> <u>Red oaks</u>	97 97 120 110 -	93-103 93-103 110-125 105-115 -	Slight	Slight	Slight	<u>Slash pine</u> <u>Loblolly pine</u> <u>Yellow-poplar</u> <u>Sycamore</u> <u>Cottonwood</u>	1o7
<u>Robertsdale</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Sweetgum</u> <u>Blackgum</u> <u>Red oaks</u>	90 90 83 - -	85-96 85-96 80-90 - -	Slight	Moderate	Moderate	<u>Loblolly pine</u> <u>Slash pine</u> <u>Sweetgum</u> <u>Sycamore</u>	2w8
<u>Ruston</u> 1-25% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	91 90 74	86-96 86-95 68-79	Slight	Slight	Slight	<u>Slash pine</u> <u>Loblolly pine</u>	2o1
<u>Rutledge</u> 0-2% slopes	<u>Slash pine 1/</u> <u>Loblolly pine 1/</u> Tupelos Cypress	86 86 - -	78-94 78-94 - -	Slight	Severe 2/	Severe 2/	<u>Slash pine 3/</u> <u>Loblolly pine 3/</u>	2w3
<u>Santee</u> 0-2% slopes	<u>Loblolly pine 1/</u> <u>Slash pine 1/</u> <u>Sweetgum 1/</u> Tupelos Water oaks	100 100 100 - 100	92-108 92-108 95-105 - -	Slight	Severe 2/	Severe 2/	<u>Slash pine 3/</u> <u>Loblolly pine 3/</u> <u>Sweetgum 3/</u> <u>Sycamore 3/</u> <u>Water tupelo</u>	1w9
<u>Sawyer</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Sweetgum</u> <u>Red oaks</u> <u>White oaks</u> <u>Yellow-poplar</u>	90 90 90 - - -	85-95 85-95 84-96 - - -	Slight	Moderate	Slight	<u>Loblolly pine</u> <u>Slash pine</u> <u>Sycamore</u> <u>Yellow-poplar</u>	2w8
<u>Scranton</u> 0-2% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u>	83 83 68	72-88 72-88 62-75	Slight	Moderate	Moderate	<u>Slash pine</u> <u>Loblolly pine</u>	3w2

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	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Seabrook</u> 0-2% slopes	Slash pine Loblolly pine Longleaf pine	87 87 70	80-92 80-92 64-75	Slight	Moderate	Moderate	Slash pine Loblolly pine	2w2
<u>Seewee</u> 0-2% slopes	Slash pine Loblolly pine Longleaf pine	80 80 72	75-85 75-85 66-80	Slight	Moderate	Slight	Slash pine Loblolly pine	3w2
<u>Shubuta</u> (loamy sand to fine sandy loam) 1-25% slopes	Loblolly pine Slash pine Longleaf pine	82+4 80 70	76-87 75-85 65-75	Slight	Slight	Slight	Loblolly pine Slash pine	3o1
sandy clay to silty clay, eroded, 5-25% slopes	Loblolly pine	76	-	Moderate	Moderate	Moderate	Loblolly pine	3c2
<u>Stilson</u> 0-5% slopes	Loblolly pine Slash pine Longleaf pine	83 83+5 70	- - -	Slight	Moderate	Slight to Moderate	Slash pine Loblolly pine Longleaf pine	3s2
<u>Stono</u> 0-2% slopes	Loblolly pine 1/ Slash pine 1/ Tupelos Cypress Pond pine	96 93 - - -	88-103 85-100 - - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Sycamore 3/ Shumard oak Water tupelo	1w9
<u>Sunsweet</u> 0-15% slopes	Loblolly pine Slash pine Longleaf pine	84 84 65	76-90 77-90 60-70	Slight	Moderate	Moderate	Loblolly pine	3c2
<u>Surrency</u> 0-2% slopes	Loblolly pine 1/ Slash pine 1/ Sweetgum 1/ Tupelos	95 90 90 -	90-102 85-96 - -	Slight	Severe 2/Severe 2/		Loblolly pine 3/ Slash pine 3/ Sycamore 3/ Sweetgum 3/ Water tupelo	2w9
<u>Susquehanna</u> 1-25% slopes	Loblolly pine Slash pine Longleaf pine	82+6 80+5 67+6	75-89 75-89 60-74	Slight to Moderate	Moderate	Moderate	Loblolly pine	3c2
<u>Tifton</u> 0-10% slopes	Loblolly pine Slash pine Longleaf pine	86 86 68+4	80-92 80-92 63-73	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Torhunta</u> 0-2% slopes	Loblolly pine 1/ Slash pine 1/ Sweetgum 1/ Tupelos	90 86 90 -	78-94 75-90 82-97 -	Slight	Severe 2/Severe 2/		Slash pine 3/ Loblolly pine 3/ Sweetgum 3/ Sycamore 3/ Shumard oak 3/	2w9

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Associated Areas of Georgia, North Carolina and South Carolina

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trebloc 0-2% slopes	Loblolly pine 1/ Slash pine 1/ Water oaks 1/ Sweetgum 1/	95+6 95 90 96	88-102 88-102 80-98 90-105	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Sweetgum 3/ Sycamore 3/ Nuttall oak	2w9
Troup 1-25% slopes	Loblolly pine Slash pine Longleaf pine	82+5 84 64+5	76-88 76-90 58-69	Slight	Moderate	Moderate	Slash pine Longleaf pine	3s2
Tuckerman 0-2% slopes	Loblolly pine 1/ Slash pine 1/ Sweetgum 1/ Tupelos Red oaks	92 91 90 - -	82-98 82-98 85-97 - -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/ Shumard oak 3/	2w9
Varina 0-10% slopes	Loblolly pine Slash pine Longleaf pine	85 85 70	80-90 80-90 65-75	Slight	Slight	Slight	Loblolly pine Slash pine	3o1
Vaucluse 2-25% slopes	Loblolly pine Slash pine Longleaf pine	76+6 75 56+5	70-84 70-84 50-62	Slight	Slight	Slight	Loblolly pine Slash pine	3o1
Wadmalaw 0-2% slopes	Loblolly pine 1/ Slash pine 1/ Sweetgum 1/ Tupelos Red oaks White oaks	108+6 105 100 - - -	95-110 92-108 90-110 - - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Sycamore 3/ Sweetgum 3/ Water tupelo	1w9
Wagram 1-15% slopes	Loblolly pine Slash pine Longleaf pine	82+5 80 67+4	77-87 75-85 67-72	Slight	Moderate	Moderate	Slash pine Longleaf pine	3s2
Wahee 0-5% slopes	Loblolly pine Slash pine Sweetgum Water oak Red oaks White oaks White ash	86+4 85 90 - - - -	78-94 75-91 80-100 - - - -	Slight	Moderate	Moderate	Loblolly pine Slash pine Sycamore Yellow-poplar	2w8
Wando 0-5% slopes	Loblolly pine Slash pine Longleaf pine	79 77 70+1	74-85 73-85 67-74	Slight	Moderate	Moderate	Slash pine Longleaf pine	3s2
Weeksville 0-5% slopes	Loblolly pine 1/ Red oaks White oaks Tupelos	90 - - -	82-98 - - -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/ Sycamore 3/ Shumard oak Water tupelo	2w9

[illegible]

Table 3, SOILS GROUPINGS ACCORDING TO WOODLAND SUITABILITY, is a summary of the most important interpretations for a woodland suitability group of soils.

Column one (1) includes the suitability group symbol and a brief description of the group of soils, including their important hazards and limitations for woodland use and management.

Column two (2) is a tabulation of the soils within each woodland suitability group.

Column three (3) is a list of some commercially-important tree species which occur on the soils in each suitability group.

Column four (4) shows the site class (site index rounded off to the nearest 10-foot interval) for the most important tree species listed in column three.

Column five (5) lists some of the most important tree species which are suitable for planting or direct seeding on the soils in each suitability group.

TABLE 3. SOIL GROUPINGS ACCORDING TO WOODLAND SUITABILITY

Page 1 of 4

Coastal Plain and Associated Areas of Georgia, North Carolina and South Carolina

Woodland Suitability Group (Symbol and Description) (1)	Soils (2)	Productivity		Species Suitable for Planting (5)
		Tree Species (3)	Site Class (4)	
<u>1o7</u> Soils with very high potential productivity; no serious management problems; suitable for broadleaf and/or needleleaf trees.	Ochlockonee, 0-5% slopes Riverview, 0-5% slopes	Loblolly pine Slash pine Sweetgum Water oak Yellow-poplar Red oaks White oaks	100 100 90 80 - - -	Slash pine Loblolly pine Yellow-poplar Sycamore Cottonwood Cherrybark oak
<u>1w8</u> Seasonally wet soils with very high potential productivity; moderate equipment restrictions and slight to moderate seedling mortality; suitable for broadleaf and/or needleleaf trees.	Edisto, 0-2% slopes Iuka, 0-2% slopes Mantachie, 0-2% slopes	Loblolly pine Slash pine Sweetgum Yellow-poplar Green ash Red oaks White oaks	100 100 100 110 - - -	Slash pine Loblolly pine Yellow-poplar Sycamore Cherrybark oak
<u>1w9</u> Excessively wet soils with very high potential productivity; severe equipment restrictions and seedling mortality on areas without adequate surface drainage. Suitable for needleleaf and/or broadleaf trees.	Hyde, 0-2% slopes Johnston, 0-2% slopes Kinston, 0-2% slopes Meggett, 0-2% slopes Pantego, 0-2% slopes Portsmouth, 0-2% slopes Santee, 0-2% slopes Stono, 0-2% slopes Wadmalaw, 0-2% slopes Yonges, 0-2% slopes	Slash pine <u>1/</u> Loblolly pine <u>1/</u> Water oaks <u>1/</u> Tupelos Pond pine	100 100 90-100 - 80	Loblolly pine <u>2/</u> Slash pine <u>2/</u> Sweetgum <u>2/</u> Sycamore <u>2/</u> Water tupelo Shumard oak
<u>2o1</u> Soils with high potential productivity; no serious management problems; best suited for needleleaf trees.	Aycock, 0-10% slopes Bowie, 0-10% slopes Brogdon, 0-5% slopes Cahaba, upper slopes 5-25% slopes Carnegie, 0-10% slopes Cowarts, 2-10% slopes Kalmia, upper slopes 2-25% slopes Norfolk, 0-15% slopes Orangeburg, 1-25% slopes Poarch, 0-5% slopes Red Bay, 1-15% slopes Ruston, 1-25% slopes Tifton, 0-10% slopes Dothan, 2-10% slopes	Loblolly pine Slash pine Longleaf pine	90 90 70	Slash pine Loblolly pine
<u>2o7</u> Soils with high potential productivity; no serious management problems; suited for needleleaf and/or broadleaf trees.	Amite, 0-5% slopes Cahaba, lower slopes and terraces, 0-10% slopes Hockley, 0-5% slopes Irvington, 0-10% slopes Kalmia, lower slopes and terraces, 0-10% slopes Maxton, 0-10% slopes Nixonton, 0-5% slopes Wickham, 1-15% slopes	Loblolly pine Slash pine Yellow-poplar Red oaks White oaks	90 90 100 - -	Slash pine Loblolly pine Yellow-poplar Black walnut
<u>2w2</u> Seasonally wet soils with high productivity; moderate equipment restrictions and slight to moderate seedling mortality; best suited for needleleaf trees.	Alapaha, 0-5% slopes Chipley, 0-5% slopes Johns, 0-2% slopes Seabrook, 0-2% slopes	Loblolly pine Slash pine Longleaf pine	90 90 70	Loblolly pine Slash pine

1/ Potential productivity attainable only on areas with adequate surface drainage.2/ Tree planting is feasible only on areas with adequate surface drainage.

TABLE 3. SOIL GROUPINGS ACCORDING TO WOODLAND SUITABILITY

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Coastal Plain and Associated Areas of Georgia, North Carolina and South Carolina

Woodland Suitability Group (Symbol and Description) (1)	Soils (2)	Productivity		Species Suitable for Planting (5)
		Tree Species (3)	Site Class (4)	
<u>2w3</u> Excessively wet soils with high potential productivity; severe equipment limitations and seedling mortality without adequate surface drainage; best suited for needleleaf trees.	Pelham, 0-2% slopes Plummer, 0-2% slopes Rains, 0-2% slopes Rutledge, 0-2% slopes	Loblolly pine Slash pine Longleaf pine	90 90 70	Slash pine Loblolly pine
<u>2w8</u> Seasonally wet soils with high potential productivity moderate equipment restrictions and slight to moderate seedling mortality; suitable for needle-leaf trees and/ or broad-leaf trees.	Angie, 0-5% slopes Ardilla, 0-5% slopes Augusta, 0-5% slopes Barclay, 0-2% slopes Dragston, 0-5% slopes Dunbar, 0-5% slopes Duplin, 0-5% slopes Exum, 0-5% slopes Fairhope, 0-5% slopes Goldsboro, 0-5% slopes Grangeburg, 0-5% slopes Izagora, 0-5% slopes Lenoir, 0-5% slopes Lynchburg, 0-5% slopes Nahunta, 0-2% slopes Robertsdale, 0-5% slopes Sawyer, 0-5% slopes Wahee, 0-5% slopes	Loblolly pine Slash pine Sweetgum Yellow-poplar Water oak Blackgum Red oaks White oaks	90 90 90 100 90 - - -	Loblolly pine Slash pine Yellow-poplar Sycamore Sweetgum
<u>2w9</u> Excessively wet soils with high potential productivity severe equipment restrictions and seedling mortality on areas without adequate surface drainage; suitable for broadleaf and/or needleleaf trees.	Amy, 0-2% slopes Bayboro, 0-2% slopes Bibb, 0-2% slopes Bladen, 0-2% slopes Byars, 0-2% slopes Cape Fear, 0-2% slopes Chastain, 0-2% slopes Coxville, 0-2% slopes Dawhoo, 0-2% slopes Grady, 0-2% slopes Leaf, 0-2% slopes Lumbee, 0-2% slopes McColl, 0-2% slopes Myatt, 0-2% slopes Pasquotank, 0-2% slopes Pooler, 0-2% slopes Surrency, 0-2% slopes Torhunta, 0-2% slopes Trebloc, 0-2% slopes Tuckerman, 0-2% slopes Weeksville, 0-2% slopes Weston, 0-2% slopes	Loblolly pine <u>1/</u> Slash pine <u>1/</u> Tupelos Cypress Sweetgum <u>1/</u> Green ash Red oaks White oaks	90 90 - - 90 - - -	Loblolly pine <u>2/</u> Slash pine <u>2/</u> Sweetgum <u>2/</u> Sycamore <u>2/</u> Water tupelo Shumard oak <u>2/</u> Water oak <u>2/</u>
<u>2s8</u> Sandy soils with high potential productivity; moderate equipment restrictions and seedling mortality; suitable for broadleaf and/or needle-leaf trees.	Buncombe, 0-5% slopes	Loblolly pine Slash pine Water oak Sweetgum Cottonwood Sycamore	90 90 90 90 100 -	Sycamore Cottonwood Slash pine

TABLE 3. SOIL GROUPINGS ACCORDING TO WOODLAND SUITABILITY Page 3 of 4
Coastal Plain and Associated Areas of Georgia, North Carolina and South Carolina

Woodland Suitability Group (Symbol and Description) (1)	Soils (2)	Productivity		Species Suitable for Planting (5)
		Tree Species (3)	Site Class (4)	
<u>3o1</u> Soils with moderately high productivity; no serious management problem; best suited for needleleaf trees.	Charleston, 0-5% slopes Esto, 2-15% slopes Faceville, 2-25% slopes Gilead, 2-15% slopes Greenville, 0-15% slopes Henderson, 2-15% slopes Magnolia, 0-25% slopes Marlboro, 0-15% slopes Onslow, 0-5% slopes Shubuta, 1-25% slopes Varina, 0-10% slopes Vaucluse, 2-25% slopes	Loblolly pine Slash pine Longleaf pine	80 80 60-70	Loblolly pine Slash pine
<u>3c2</u> Clayey soils with moderately high productivity; moderate equipment limitations and seedling mortality; best suited for needleleaf trees.	Boswell, 1-15% slopes Cuthbert, 2-15% slopes Faceville, eroded, 5-25% slopes Greenville, eroded, 5-15% slopes Magnolia, eroded, 5-25% slopes Marlboro, eroded, 5-15% slopes Shubuta, eroded, 5-25% slopes Sunsweet, 0-15% slopes Susquehanna, 1-25% slopes	Loblolly pine Slash pine Longleaf pine	80 80 60-70	Loblolly pine
<u>3c8</u> Clayey soils with moderately high productivity; moderate equipment restrictions and seedling mortality; suitable for broadleaf and/or needleleaf trees.	Oktibbeha, 2-10% slopes	Loblolly pine Redcedar Southern red oak	80 40 70	Redcedar Loblolly pine
<u>3s2</u> Sandy soils with moderately high productivity; moderate equipment restrictions and seedling mortality; best suited for needleleaf trees.	Alaga, 1-25% slopes Americus, 1-25% slopes Blanton, 1-10% slopes Eustis, 2-25% slopes Fuquay, 2-25% slopes Kenansville, 0-5% slopes Lucy, 1-25% slopes Pocalla, 0-15% slopes Stilson, 0-5% slopes Troup, 1-25% slopes Wagram, 1-15% slopes Wando, 0-5% slopes Wicksburg, 0-10% slopes	Slash pine Loblolly pine Longleaf pine	80 80 60-70	Slash pine Longleaf pine
<u>3w2</u> Seasonally wet soils with moderately high potential productivity; moderate equipment restrictions and slight to moderate seedling mortality; best suited for needleleaf trees.	Abany, 0-5% slopes Barth, 0-5% slopes Craven, 0-15% slopes Kiawah, 0-5% slopes Leefield, 0-5% slopes Mascotte, 0-2% slopes Ocilla, 0-5% slopes Olustee, 0-2% slopes Pactolus, 0-5% slopes Scranton, 0-2% slopes Seewee, 0-2% slopes	Loblolly pine Slash pine Longleaf pine	80 80 70	Slash pine Loblolly pine

TABLE 3. SOIL GROUPINGS ACCORDING TO WOODLAND SUITABILITY
Coastal Plain and Associated Areas of Georgia, North Carolina and South Carolina Page 4 of 4

Woodland Suitability Group (Symbol and Description) (1)	Soils (2)	Productivity		Species Suitable for Planting (5)
		Tree Species (3)	Site Class (4)	
<u>3w3</u> Excessively wet soils with moderately high potential productivity; severe equipment restrictions and seedling mortality without adequate surface drainage; best suited for needleleaf trees.	Osier, 0-2% slopes	Loblolly pine <u>1</u> / Slash pine <u>1</u> / Longleaf pine <u>1</u> /	80 80 70	Slash pine <u>2</u> / Loblolly pine <u>2</u> /
<u>3w9</u> Excessively wet soils with moderately high potential productivity; severe equipment restrictions and seedling mortality except on areas with adequate surface drainage; suitable for needleleaf and/or broad-leaf trees.	Atmore, 0-2% slopes Pansey, 0-2% slopes	Slash pine <u>1</u> / Loblolly pine <u>1</u> / Longleaf pine <u>1</u> / Sweetgum <u>1</u> / Water oak Green ash	80 80 70 80 80 -	Loblolly pine <u>2</u> / Slash pine <u>2</u> / Sycamore <u>2</u> / Nuttall oak <u>2</u> / Shumard oak <u>2</u> /
<u>4o1</u> Soils with moderate productivity and no serious management problems; best suited for needleleaf trees.	<u>Hoffman</u> , 1-15% slopes	<u>Longleaf pine</u> Loblolly pine	60 60-70	Slash pine Longleaf pine
<u>4s2</u> Sandy soils with moderate productivity; moderate equipment restrictions and seedling mortality; best suited for needleleaf trees.	Blaney, 1-15% slopes Lakeland, 1-25% slopes	Slash pine Loblolly pine Longleaf pine	70 70 60	Longleaf pine Sand pine Slash pine
<u>4w2</u> Seasonally wet soils with moderate productivity; moderate seedling mortality and equipment restrictions; best suited for needleleaf trees.	Leon, 0-5% slopes	Slash pine Loblolly pine Longleaf pine	70 70 60	Slash pine Loblolly pine
<u>4w3</u> Excessively wet soils with moderate productivity; severe equipment restrictions and seedling mortality; suitable for needleleaf trees.	Dorovan, 0-2% slopes Lynn Haven, 0-2% slopes Pamlico, 0-2% slopes Ponzer, 0-2% slopes	Slash pine <u>1</u> / Loblolly pine <u>1</u> / Tupelos Magnolias	70 70 - -	Slash pine <u>2</u> / Loblolly pine <u>2</u> /
<u>5s3</u> Sandy soils with low productivity; severe seedling mortality and moderate equipment restrictions; best suited for needleleaf trees.	Kershaw, 2-25% slopes Rimini, 0-5% slopes	Longleaf pine Slash pine	50 60	Longleaf pine Sand pine Slash pine

